



AH3781

## APPROVAL REVIEW FORM

Generator Name Detroit Housing Profile Number AH LabradWaste Name Fill Soil

Has a completed profile been completed including the following	Yes	No
Generator Name and Address	<input type="checkbox"/>	<input type="checkbox"/>
Acceptable Waste Name and Process Generating Waste	<input type="checkbox"/>	<input type="checkbox"/>
Acceptable Composition and Physical Characteristics	<input type="checkbox"/>	<input type="checkbox"/>
Complete Sample information and/or MSDS	<input type="checkbox"/>	<input type="checkbox"/>
Properly signed by generator	<input type="checkbox"/>	<input type="checkbox"/>

Waste Category 291Disposal Method J

Next Retest Date \_\_\_\_\_

Parameters to be tested \_\_\_\_\_

Conditions of Approval:

---

---

---

---

Based on a review of the information submitted by the generator the above referenced waste is acceptable for disposal.

Approvals signature

Date

6-12-08

Landfill Signature

Date

6-10-08



Friday, August 01, 2008

Fibertec Project Number: 29925  
Project Identification: Garden View Estates (2)/14-070621-01  
Submittal Date: 7/25/2008

Mr. Eric Schupp

NTH Consultants, Ltd. - Detroit  
480 Ford Field (Gate G)  
2000 Brush Street  
Detroit, MI 48226

Dear Mr. Schupp,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed by NELAC compliant methodologies and the results compiled in the attached report. Any exceptions to compliance are noted in the report. These results apply only to those samples submitted.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345. Please note samples will be disposed of 30 days after reporting date.

Sincerely,

A handwritten signature in black ink, enclosed in a red rectangular box. The signature appears to read "Daryl P. Strandbergh".

Daryl P. Strandbergh  
Laboratory Director

DPS/kc

Enclosures

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
F: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

[lab@fibertec.us](mailto:lab@fibertec.us)

## Analytical Laboratory Report

Client Identification: **NTH Consultants, Ltd. - Detroit** Sample Matrix: **Soil/Solid**  
Fibertec Project Number: **29925** Sample Number: **29925-001A**

### Client Sample Information

Project Identification: **Garden View Estates (2)** Client Sample Description: **Composite Sample #1**  
Project Number: **14-070621-01** Client Sample Number: **CS-1**  
Sample Date: **7/24/2008** Chain of Custody Number: **75216**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 21.1%.**  
Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**  
**FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;**  
**E = Estimated value; J = Analyte positively identified - estimated value**  
**X - Spike recovery distorted due to elevated sample target analyte concentration ( $\geq 4X$  the amount spiked)**  
**Y - Spike unrecoverable due to sample dilution.**

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
<b>Dry Weight Determination (ASTM D 2974-87)</b>								
Percent Moisture (Water Content)	<b>21</b>	%	0.1	1	MC080728	7/29/2008	7/29/2008	BMG
<b>Ignitability of Solids (Waste Characterization) (EPA 1030)</b>								
Ignitability	<b>negative</b>	mm/s	NA	1	WX08G29A	NA	7/29/2008	HAW
<b>Polychlorinated Biphenyls (PCBs) (EPA 3550B/EPA 8082)</b>								
Aroclor-1016	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1221	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1232	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1242	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1248	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1254	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1260	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1262	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1268	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
<b>Corrosivity (Waste Characterization) (EPA 9045C)</b>								
pH	<b>7.60</b>	pH Units	NA	1	WD08G29A	7/29/2008	7/29/2008	HAW
<b>Reactive Sulfide (Waste Characterization) (EPA H2S)</b>								
Sulfide, Reactive	ND	mg/kg	6.6	1	WG08G30A	NA	7/30/2008	HAW
<b>Reactive Cyanide (Waste Characterization) (EPA HCN)</b>								
Cyanide, Reactive	ND	mg/kg	8.6	1	WG08G30A	NA	7/30/2008	HAW

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

## Analytical Laboratory Report

Client Identification: **NTH Consultants, Ltd. - Detroit** Sample Matrix: **TCLP Extract**  
Fibertec Project Number: **29925** Sample Number: **29925-001B**

### Client Sample Information

Project Identification: **Garden View Estates (2)** Client Sample Description: **Composite Sample #1**  
Project Number: **14-070621-01** Client Sample Number: **CS-1**  
Sample Date: **7/24/2008** Chain of Custody Number: **75216**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 21.1%.**  
Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**  
**FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;**  
**E = Estimated value; J = Analyte positively identified - estimated value**  
**X - Spike recovery distorted due to elevated sample target analyte concentration ( $\geq 4X$  the amount spiked)**  
**Y - Spike unrecoverable due to sample dilution.**

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
<b>TCLP RCRA-8 Elements by ICP-MS (EPA 3010A/EPA 6020) (TCLP (1311) Extraction Date: 7/28/2008)</b>								
Arsenic	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Barium	<b>1.3</b>	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Cadmium	ND	mg/L	0.20	1	PT08G29B	7/29/2008	7/29/2008	KLB
Chromium	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Lead	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Selenium	ND	mg/L	0.20	1	PT08G29B	7/29/2008	7/29/2008	KLB
Silver	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
<b>TCLP Mercury (EPA 7470A) (TCLP (1311) Extraction Date: 7/28/2008)</b>								
Mercury	ND	mg/L	0.050	1	PM08G30B	7/30/2008	7/30/2008	JEK
<b>TCLP Volatiles (EPA 5030B/EPA 8260B) (TCLP (1311) Extraction Date: 7/28/2008; Estimated results 2-Butanone failed loc for CCV.)</b>								
Benzene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Carbon Tetrachloride	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Chlorobenzene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Chloroform	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
1,1-Dichloroethene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
1,2-Dichloroethane	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
1,4-Dichlorobenzene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
2-Butanone	ND	mg/L	0.50	20	V908G29A	7/29/2008	7/29/2008	JAS
Tetrachloroethene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

## Analytical Laboratory Report

Client Identification: **NTH Consultants, Ltd. - Detroit** Sample Matrix: **TCLP Extract**  
Fibertec Project Number: **29925** Sample Number: **29925-001B**

### Client Sample Information

Project Identification: **Garden View Estates (2)** Client Sample Description: **Composite Sample #1**  
Project Number: **14-070621-01** Client Sample Number: **CS-1**  
Sample Date: **7/24/2008** Chain of Custody Number: **75216**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 21.1%.**  
Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**  
**FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;**  
**E = Estimated value; J = Analyte positively identified - estimated value**  
**X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)**  
**Y - Spike unrecoverable due to sample dilution.**

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
<b>TCLP Volatiles (EPA 5030B/EPA 8260B) (TCLP (1311) Extraction Date: 7/28/2008; Estimated results 2-Butanone failed loc for CCV.)</b>								
Trichloroethene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Vinyl Chloride	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
<b>TCLP Semivolatiles (EPA 3510C/EPA 8270C) (TCLP (1311) Extraction Date: 7/29/2008)</b>								
1,4-Dichlorobenzene	ND	mg/L	0.10	1	45945	7/30/2008	7/30/2008	HLS
2,4-Dinitrotoluene	ND	mg/L	0.10	4	45945	7/30/2008	7/30/2008	HLS
Hexachlorobenzene	ND	mg/L	0.10	4	45945	7/30/2008	7/30/2008	HLS
Hexachlorobutadiene	ND	mg/L	0.10	1	45945	7/30/2008	7/30/2008	HLS
Hexachloroethane	ND	mg/L	0.10	1	45945	7/30/2008	7/30/2008	HLS
2-Methylphenol	ND	mg/L	0.10	1	45945	7/30/2008	7/30/2008	HLS
3&4-Methylphenol	ND	mg/L	0.10	1	45945	7/30/2008	7/30/2008	HLS
Nitrobenzene	ND	mg/L	0.10	1	45945	7/30/2008	7/30/2008	HLS
Pentachlorophenol	ND	mg/L	0.10	1	45945	7/30/2008	7/30/2008	HLS
Pyridine	ND	mg/L	0.10	1	45945	7/30/2008	7/30/2008	HLS
2,4,5-Trichlorophenol	ND	mg/L	0.10	1	45945	7/30/2008	7/30/2008	HLS
2,4,6-Trichlorophenol	ND	mg/L	0.10	1	45945	7/30/2008	7/30/2008	HLS

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

## Analytical Laboratory Report

Client Identification: **NTH Consultants, Ltd. - Detroit** Sample Matrix: **Soil/Solid**  
Fibertec Project Number: **29925** Sample Number: **29925-002A**

### Client Sample Information

Project Identification: **Garden View Estates (2)** Client Sample Description: **Composite Sample #2**  
Project Number: **14-070621-01** Client Sample Number: **CS-2**  
Sample Date: **7/24/2008** Chain of Custody Number: **75216**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 25.9%.**  
Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**  
**FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;**  
**E = Estimated value; J = Analyte positively identified - estimated value**  
**X - Spike recovery distorted due to elevated sample target analyte concentration ( $\geq 4X$  the amount spiked)**  
**Y - Spike unrecoverable due to sample dilution.**

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
<b>Dry Weight Determination (ASTM D 2974-87)</b>								
Percent Moisture (Water Content)	<b>26</b>	%	0.1	1	MC080728	7/29/2008	7/29/2008	BMG
<b>Ignitability of Solids (Waste Characterization) (EPA 1030)</b>								
Ignitability	<b>negative</b>	mm/s	NA	1	WX08G29A	NA	7/29/2008	HAW
<b>Polychlorinated Biphenyls (PCBs) (EPA 3550B/EPA 8082)</b>								
Aroclor-1016	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1221	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1232	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1242	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1248	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1254	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1260	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1262	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1268	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
<b>Corrosivity (Waste Characterization) (EPA 9045C)</b>								
pH	<b>7.84</b>	pH Units	NA	1	WD08G29A	7/29/2008	7/29/2008	HAW
<b>Reactive Sulfide (Waste Characterization) (EPA H2S)</b>								
Sulfide, Reactive	ND	mg/kg	6.6	1	WG08G30A	NA	7/30/2008	HAW
<b>Reactive Cyanide (Waste Characterization) (EPA HCN)</b>								
Cyanide, Reactive	ND	mg/kg	8.6	1	WG08G30A	NA	7/30/2008	HAW

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

## Analytical Laboratory Report

Client Identification: **NTH Consultants, Ltd. - Detroit** Sample Matrix: **TCLP Extract**  
Fibertec Project Number: **29925** Sample Number: **29925-002B**

### Client Sample Information

Project Identification: **Garden View Estates (2)** Client Sample Description: **Composite Sample #2**  
Project Number: **14-070621-01** Client Sample Number: **CS-2**  
Sample Date: **7/24/2008** Chain of Custody Number: **75216**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 25.9%.**  
Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**  
**FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;**  
**E = Estimated value; J = Analyte positively identified - estimated value**  
**X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)**  
**Y - Spike unrecoverable due to sample dilution.**

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
<b>TCLP RCRA-8 Elements by ICP-MS (EPA 3010A/EPA 6020) (TCLP (1311) Extraction Date: 7/28/2008)</b>								
Arsenic	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Barium	1.3	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Cadmium	ND	mg/L	0.20	1	PT08G29B	7/29/2008	7/29/2008	KLB
Chromium	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Lead	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Selenium	ND	mg/L	0.20	1	PT08G29B	7/29/2008	7/29/2008	KLB
Silver	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
<b>TCLP Mercury (EPA 7470A) (TCLP (1311) Extraction Date: 7/28/2008)</b>								
Mercury	ND	mg/L	0.050	1	PM08G30B	7/30/2008	7/30/2008	JEK
<b>TCLP Volatiles (EPA 5030B/EPA 8260B) (TCLP (1311) Extraction Date: 7/28/2008; Estimated results 2-Butanone failed loc for CCV.)</b>								
Benzene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Carbon Tetrachloride	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Chlorobenzene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Chloroform	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
1,1-Dichloroethene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
1,2-Dichloroethane	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
1,4-Dichlorobenzene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
2-Butanone	ND	mg/L	0.50	20	V908G29A	7/29/2008	7/29/2008	JAS
Tetrachloroethene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

## Analytical Laboratory Report

Client Identification: **NTH Consultants, Ltd. - Detroit** Sample Matrix: **TCLP Extract**  
Fibertec Project Number: **29925** Sample Number: **29925-002B**

### Client Sample Information

Project Identification: **Garden View Estates (2)** Client Sample Description: **Composite Sample #2**  
Project Number: **14-070621-01** Client Sample Number: **CS-2**  
Sample Date: **7/24/2008** Chain of Custody Number: **75216**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 25.9%.**  
Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**  
**FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;**  
**E = Estimated value; J = Analyte positively identified - estimated value**  
**X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)**  
**Y - Spike unrecoverable due to sample dilution.**

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
<b>TCLP Volatiles (EPA 5030B/EPA 8260B) (TCLP (1311) Extraction Date: 7/28/2008; Estimated results 2-Butanone failed loc for CCV.)</b>								
Trichloroethene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Vinyl Chloride	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
<b>TCLP Semivolatiles (EPA 3510C/EPA 8270C) (TCLP (1311) Extraction Date: 7/29/2008)</b>								
1,4-Dichlorobenzene	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
2,4-Dinitrotoluene	ND	mg/L	0.10	4	45945	7/30/2008	7/31/2008	HLS
Hexachlorobenzene	ND	mg/L	0.10	4	45945	7/30/2008	7/31/2008	HLS
Hexachlorobutadiene	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
Hexachloroethane	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
2-Methylphenol	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
3&4-Methylphenol	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
Nitrobenzene	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
Pentachlorophenol	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
Pyridine	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
2,4,5-Trichlorophenol	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
2,4,6-Trichlorophenol	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584



## Analytical Laboratory Report

Client Identification: **NTH Consultants, Ltd. - Detroit** Sample Matrix: **Soil/Solid**  
Fibertec Project Number: **29925** Sample Number: **29925-003A**

### Client Sample Information

Project Identification: **Garden View Estates (2)** Client Sample Description: **Composite Sample #3**  
Project Number: **14-070621-01** Client Sample Number: **CS-3**  
Sample Date: **7/24/2008** Chain of Custody Number: **75216**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 21.2%.**  
Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**  
**FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;**  
**E = Estimated value; J = Analyte positively identified - estimated value**  
**X - Spike recovery distorted due to elevated sample target analyte concentration ( $\geq 4X$  the amount spiked)**  
**Y - Spike unrecoverable due to sample dilution.**

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
<b>Dry Weight Determination (ASTM D 2974-87)</b>								
Percent Moisture (Water Content)	<b>21</b>	%	0.1	1	MC080728	7/29/2008	7/29/2008	BMG
<b>Ignitability of Solids (Waste Characterization) (EPA 1030)</b>								
Ignitability	<b>negative</b>	mm/s	NA	1	WX08G29A	NA	7/29/2008	HAW
<b>Polychlorinated Biphenyls (PCBs) (EPA 3550B/EPA 8082)</b>								
Aroclor-1016	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1221	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1232	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1242	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1248	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1254	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1260	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1262	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
Aroclor-1268	ND	µg/kg	330	1	45944	7/31/2008	7/31/2008	BDA
<b>Corrosivity (Waste Characterization) (EPA 9045C)</b>								
pH	<b>7.80</b>	pH Units	NA	1	WD08G29A	7/29/2008	7/29/2008	HAW
<b>Reactive Sulfide (Waste Characterization) (EPA H2S)</b>								
Sulfide, Reactive	ND	mg/kg	6.6	1	WG08G30A	NA	7/30/2008	HAW
<b>Reactive Cyanide (Waste Characterization) (EPA HCN)</b>								
Cyanide, Reactive	ND	mg/kg	8.6	1	WG08G30A	NA	7/30/2008	HAW

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

## Analytical Laboratory Report

Client Identification: **NTH Consultants, Ltd. - Detroit** Sample Matrix: **TCLP Extract**  
Fibertec Project Number: **29925** Sample Number: **29925-003B**

### Client Sample Information

Project Identification: **Garden View Estates (2)** Client Sample Description: **Composite Sample #3**  
Project Number: **14-070621-01** Client Sample Number: **CS-3**  
Sample Date: **7/24/2008** Chain of Custody Number: **75216**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 21.2%.**  
Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**  
**FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;**  
**E = Estimated value; J = Analyte positively identified - estimated value**  
**X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)**  
**Y - Spike unrecoverable due to sample dilution.**

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
<b>TCLP RCRA-8 Elements by ICP-MS (EPA 3010A/EPA 6020) (TCLP (1311) Extraction Date: 7/28/2008)</b>								
Arsenic	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Barium	1.3	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Cadmium	ND	mg/L	0.20	1	PT08G29B	7/29/2008	7/29/2008	KLB
Chromium	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Lead	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
Selenium	ND	mg/L	0.20	1	PT08G29B	7/29/2008	7/29/2008	KLB
Silver	ND	mg/L	1.0	1	PT08G29B	7/29/2008	7/29/2008	KLB
<b>TCLP Mercury (EPA 7470A) (TCLP (1311) Extraction Date: 7/28/2008)</b>								
Mercury	ND	mg/L	0.050	1	PM08G30B	7/30/2008	7/30/2008	JEK
<b>TCLP Volatiles (EPA 5030B/EPA 8260B) (TCLP (1311) Extraction Date: 7/28/2008; Estimated results 2-Butanone failed loc for CCV.)</b>								
Benzene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Carbon Tetrachloride	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Chlorobenzene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Chloroform	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
1,1-Dichloroethene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
1,2-Dichloroethane	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
1,4-Dichlorobenzene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
2-Butanone	ND	mg/L	0.50	20	V908G29A	7/29/2008	7/29/2008	JAS
Tetrachloroethene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
F: (810) 220-3300  
F: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

## Analytical Laboratory Report

Client Identification: **NTH Consultants, Ltd. - Detroit** Sample Matrix: **TCLP Extract**  
Fibertec Project Number: **29925** Sample Number: **29925-003B**

### Client Sample Information

Project Identification: **Garden View Estates (2)** Client Sample Description: **Composite Sample #3**  
Project Number: **14-070621-01** Client Sample Number: **CS-3**  
Sample Date: **7/24/2008** Chain of Custody Number: **75216**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 21.2%.**  
Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**  
**FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;**  
**E = Estimated value; J = Analyte positively identified - estimated value**  
**X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)**  
**Y - Spike unrecoverable due to sample dilution.**

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
<b>TCLP Volatiles (EPA 5030B/EPA 8260B) (TCLP (1311) Extraction Date: 7/28/2008; Estimated results 2-Butanone failed loc for CCV.)</b>								
Trichloroethene	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
Vinyl Chloride	ND	mg/L	0.020	20	V908G29A	7/29/2008	7/29/2008	JAS
<b>TCLP Semivolatiles (EPA 3510C/EPA 8270C) (TCLP (1311) Extraction Date: 7/29/2008)</b>								
1,4-Dichlorobenzene	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
2,4-Dinitrotoluene	ND	mg/L	0.10	4	45945	7/30/2008	7/31/2008	HLS
Hexachlorobenzene	ND	mg/L	0.10	4	45945	7/30/2008	7/31/2008	HLS
Hexachlorobutadiene	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
Hexachloroethane	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
2-Methylphenol	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
3&4-Methylphenol	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
Nitrobenzene	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
Pentachlorophenol	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
Pyridine	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
2,4,5-Trichlorophenol	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS
2,4,6-Trichlorophenol	ND	mg/L	0.10	1	45945	7/30/2008	7/31/2008	HLS

**Fibertec**  
environmental  
services

Wednesday, April 30, 2008

Fibertec Project Number: 28433  
Project Identification: Garden View Estates/14-070621-00  
Submittal Date: 4/23/2008

Ms. Amanda Houston

3/271-3300

Steve Innis

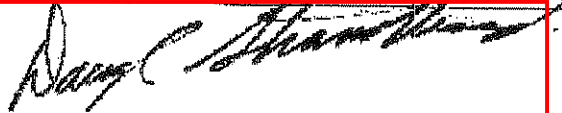
NTH Consultants, Ltd. - Detroit  
480 Ford Field (Gate G)  
2000 Brush Street  
Detroit, MI 48226

Dear Ms. Houston,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed by NELAC compliant methodologies and the results compiled in the attached report. Any exceptions to compliance are noted in the report. These results apply only to those samples submitted.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345. Please note samples will be disposed of 30 days after reporting date.

Sincerely,



Daryl P. Strandbergh  
Laboratory Director

DPS/kc

Enclosures

1974 Holloway Drive  
11766 E. Grand River  
0660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8504

[info@fibertec.us](mailto:info@fibertec.us)



28433  
Wednesday, April 30, 2008  
Page 2 of 9

## Analytical Laboratory Report

Client Identification: NTH Consultants, Ltd. - Detroit Sample Matrix: TCLP Extract  
Fibertec Project Number: 28433 Sample Number: 28433-001B

### Client Sample Information

Project Identification: Garden View Estates Client Sample Description: RET-1  
Project Number: 14-070621-00 Client Sample Number: 1  
Sample Date: 4/22/2008 Chain of Custody Number: 75103

Comments:  
Definitions: ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available  
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;  
E = Estimated value; J = Analyte positively identified - estimated value  
X = Spike recovery distorted due to elevated sample target analyte concentration ( $\geq 4X$  the amount spiked)  
Y = Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
TCLP MI-10 Elements by ICP/MS (EPA 3010A/EPA 6020) (TCLP (1311) Extraction Date: 4/28/2008)								
Arsenic	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Barium	1.5	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Cadmium	ND	mg/L	0.20	1	PT08D29B	4/29/2008	4/29/2008	JLH
Chromium	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Copper	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Lead	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Selenium	ND	mg/L	0.20	1	PT08D29B	4/29/2008	4/29/2008	JLH
Silver	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Zinc	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
TCLP Mercury (EPA 7470A) (TCLP (1311) Extraction Date: 4/28/2008)								
Mercury	ND	mg/L	0.050	1	PM08D29D	4/29/2008	4/29/2008	MAP
TCLP Volatiles (EPA 5038B/EPA 8260B) (TCLP (1311) Extraction Date: 4/28/2008)								
Benzene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Carbon Tetrachloride	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Chlorobenzene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Chloroform	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
1,1-Dichloroethene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
1,2-Dichloroethane	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
1,4-Dichlorobenzene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Mt. MI 48642  
Brighton, MI 48116  
Cadillac, MI 49801

T: (517) 688-0345  
T: (810) 220-3300  
T: (231) 775-8368

F: (517) 688-0368  
F: (810) 220-3311  
F: (231) 775-8584

lab@fibertec.us



28433

Wednesday, April 30, 2008

Page 3 of 9

## Analytical Laboratory Report

Client Identification: NTH Consultants, Ltd. - Detroit

Sample Matrix:

TCLP Extract

Fibertec Project Number: 28433

Sample Number:

28433-001B

### Client Sample Information

Project Identification: Garden View Estates

Client Sample Description:

RET-1

Project Number: 14-070621-00

Client Sample Number:

1

Sample Date: 4/22/2008

Chain of Custody Number:

75103

Comments:

Definitions:

ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available

FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;

E = Estimated value; J = Analyte positively identified - estimated value

X = Spike recovery distorted due to elevated sample target analyte concentration (&gt;=4X the amount spiked)

Y = Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
---------	--------	-------	--------------	-----------------	------------	----------------	--------------------	---------

#### TCLP Volatiles (EPA 5930B/EPA 5260B) (TCLP (1311) Extraction Date: 4/28/2008)

2-Butanone	ND	mg/L	0.50	20	VB08D29A	4/29/2008	4/29/2008	JAS
Tetrachloroethene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Trichloroethene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Vinyl Chloride	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS

#### TCLP Semivolatiles (EPA 3510C/EPA 8270C) (TCLP (1311) Extraction Date: 4/28/2008)

2,4-Dinitrotoluene	ND	mg/L	0.10	4	45366	4/29/2008	4/29/2008	LAN
Hexachlorobenzene	ND	mg/L	0.10	4	45366	4/29/2008	4/29/2008	LAN
Hexachlorobutadiene	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Hexachloroethane	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
2-Methylphenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
3&4-Methylphenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Nitrobenzene	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Pentachlorophenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Pyridine	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
2,4,5-Trichlorophenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
2,4,6-Trichlorophenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
F: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0308  
F: (810) 220-3311  
F: (231) 775-8384

lab@fibertec.us



28433

Wednesday, April 30, 2008

Page 4 of 9

## Analytical Laboratory Report

Client Identification: NTH Consultants, Ltd. - Detroit

Sample Matrix:

TCLP Extract

Fibertec Project Number: 28433

Sample Number:

28433-002B

### Client Sample Information

Project Identification: Garden View Estates

Client Sample Description:

RET-2

Project Number: 14-070621-00

Client Sample Number:

2

Sample Date: 4/22/2008

Chain of Custody Number:

75103

Comments:

Definitions:

ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available

FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;

E = Estimated value; J = Analyte positively identified - estimated value

X = Spike recovery distorted due to elevated sample target analyte concentration ( $\geq 4X$  the amount spiked)

Y = Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
---------	--------	-------	--------------	-----------------	------------	----------------	--------------------	---------

#### TCLP MI-10 Elements by ICP/MS (EPA 3810A/EPA 6020) (TCLP (3311) Extraction Date: 4/28/2008)

Arsenic	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Barium	1.8	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Cadmium	ND	mg/L	0.20	1	PT08D29B	4/29/2008	4/29/2008	JLH
Chromium	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Copper	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Lead	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Selenium	ND	mg/L	0.20	1	PT08D29B	4/29/2008	4/29/2008	JLH
Silver	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Zinc	12	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH

#### TCLP Mercury (EPA 7479A) (TCLP (3311) Extraction Date: 4/28/2008)

Mercury	ND	mg/L	0.050	1	PM08D29D	4/29/2008	4/29/2008	MAP
---------	----	------	-------	---	----------	-----------	-----------	-----

#### TCLP Volatiles (EPA 5630B/EPA 8260B) (TCLP (3311) Extraction Date: 4/28/2008)

Benzene	ND	mg/L	0.033	33.330001831	VB08D29A	4/29/2008	4/29/2008	JAS
Carbon Tetrachloride	ND	mg/L	0.033	33.330001831	VB08D29A	4/29/2008	4/29/2008	JAS
Chlorobenzene	ND	mg/L	0.033	33.330001831	VB08D29A	4/29/2008	4/29/2008	JAS
Chloroform	ND	mg/L	0.033	33.330001831	VB08D29A	4/29/2008	4/29/2008	JAS
1,1-Dichloroethane	ND	mg/L	0.033	33.330001831	VB08D29A	4/29/2008	4/29/2008	JAS
1,2-Dichloroethane	ND	mg/L	0.033	33.330001831	VB08D29A	4/29/2008	4/29/2008	JAS
1,4-Dichlorobenzene	ND	mg/L	0.033	33.330001831	VB08D29A	4/29/2008	4/29/2008	JAS

1914 Holloway Drive  
11786 E. Grand River  
8550 S. Mackinaw Trail

Hok, MI 48042  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
T: (231) 775-0368

F: (517) 699-0380  
F: (810) 220-3311  
F: (231) 775-8584

lab@fibertec.us

05/06/2008 14:06 313-309-2100

(FAX)

P.006/011

**Fibertec**  
environmental  
services

28433

Wednesday, April 30, 2008

Page 5 of 9

## Analytical Laboratory Report

Client Identification: NTH Consultants, Ltd. - Detroit Sample Matrix: TCLP Extract  
Fibertec Project Number: 28433 Sample Number: 28433-002B

### Client Sample Information

Project Identification: Garden View Estates Client Sample Description: RET-2  
Project Number: 14-070621-00 Client Sample Number: 2  
Sample Date: 4/22/2008 Chain of Custody Number: 75103

Comments:  
Definitions: ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available  
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;  
E = Estimated value; J = Analyte positively identified - estimated value  
X = Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)  
Y = Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
TCLP Volatiles (EPA 5030B/EPA 8260B) (TCLP (1311) Extraction Date: 4/28/2008)								
2-Butanone	ND	mg/L	0.83	33.330001831	VB08D29A	4/29/2008	4/29/2008	JAS
Tetrachloroethene	ND	mg/L	0.033	33.330001831	VB08D29A	4/29/2008	4/29/2008	JAS
Trichloroethene	ND	mg/L	0.033	33.330001831	VB08D29A	4/29/2008	4/29/2008	JAS
Vinyl Chloride	ND	mg/L	0.033	33.330001831	VB08D29A	4/29/2008	4/29/2008	JAS
TCLP Semivolatiles (EPA 3510C/EPA 8270C) (TCLP (1311) Extraction Date: 4/28/2008)								
2,4-Dinitrotoluene	ND	mg/L	0.10	4	45366	4/29/2008	4/29/2008	LAN
Hexachlorobenzene	ND	mg/L	0.10	4	45366	4/29/2008	4/29/2008	LAN
Hexachlorobutadiene	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Hexachloroethane	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
2-Methylphenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
3,4-Methylphenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Nitrobenzene	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Pentachlorophenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Pyridine	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
2,4,5-Trichlorophenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
2,4,6-Trichlorophenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN

1914 Holloway Drive  
11766 E. Grand River  
66602 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8684

lab@fibertec.us





28433  
Wednesday, April 30, 2008  
Page 6 of 9

## Analytical Laboratory Report

Client Identification: NTH Consultants, Ltd. - Detroit Sample Matrix: TCLP Extract  
Fibertec Project Number: 28433 Sample Number: 28433-0038

### Client Sample Information

Project Identification: Garden View Estates Client Sample Description: SED-1  
Project Number: 14-070621-00 Client Sample Number: 3  
Sample Date: 4/22/2008 Chain of Custody Number: 75103

Comments:  
Definitions: ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available  
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;  
E = Estimated value; J = Analyte positively identified - estimated value  
X = Spike recovery distorted due to elevated sample target analyte concentration ( $\geq 4X$  the amount spiked)  
Y = Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
TCLP ML-16 Elements by ICP/MS (EPA 3010A/EPA 6020) (TCLP (1311) Extraction Date: 4/28/2008)								
Arsenic	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Barium	1.6	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Cadmium	ND	mg/L	0.20	1	PT08D29B	4/29/2008	4/29/2008	JLH
Chromium	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Copper	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Lead	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Selenium	ND	mg/L	0.20	1	PT08D29B	4/29/2008	4/29/2008	JLH
Silver	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Zinc	5.8	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
TCLP Mercury (EPA 7470A) (TCLP (1311) Extraction Date: 4/28/2008)								
Mercury	ND	mg/L	0.050	1	PM08D29D	4/29/2008	4/29/2008	MAP
TCLP Volatiles (EPA 5030B/EPA 8260B) (TCLP (1311) Extraction Date: 4/28/2008)								
Benzene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Carbon Tetrachloride	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Chlorobenzene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Chloroform	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
1,1-Dichloroethane	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
1,2-Dichloroethane	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
1,4-Dichlorobenzene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS

1914 Holloway Drive  
11765 E. Grand River  
8660 S. Mackinaw Trail

Roch, MI 48842  
Brighton, MI 48116  
Cassilac, MI 49601

T: (517) 699-0345  
T: (313) 220-3300  
T: (231) 775-6368

F: (517) 699-0388  
F: (313) 220-3311  
F: (231) 775-8584

lab@fibertec.us

**Fibertec**  
environmental  
services

28433

Wednesday, April 30, 2008

Page 7 of 9

## Analytical Laboratory Report

Client Identification: NTH Consultants, Ltd. - Detroit

Sample Matrix:

TCLP Extract

Fibertec Project Number: 28433

Sample Number:

28433-003B

### Client Sample Information

Project Identification: Garden View Estates

Client Sample Description:

SED-1

Project Number: 14-070621-00

Client Sample Number:

3

Sample Date: 4/22/2008

Chain of Custody Number:

75103

Comments:

Definitions:

ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available

FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;

E = Estimated value; I = Analyte positively identified - estimated value

X = Spike recovery distorted due to elevated sample target analyte concentration (&gt;=4X the amount spiked)

Y = Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
TCLP Volatiles (EPA 5030B/EPA 8260B) (TCLP (1311) Extraction Date: 4/28/2008)								
2-Butanone	ND	mg/L	0.50	20	VB08D29A	4/29/2008	4/29/2008	JAS
Tetrachloroethene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Trichloroethene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Vinyl Chloride	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
TCLP Semivolatiles (EPA 3510C/EPA 8270C) (TCLP (1311) Extraction Date: 4/28/2008)								
2,4-Dinitrotoluene	ND	mg/L	0.10	4	45366	4/29/2008	4/29/2008	LAN
Hexachlorobenzene	ND	mg/L	0.10	4	45366	4/29/2008	4/29/2008	LAN
Hexachlorobutadiene	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Hexachlorocyclopentadiene	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
2-Methylphenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
3,4-Methylphenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Nitrobenzene	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Pentachlorophenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Pyridine	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
2,4,5-Trichlorophenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
2,4,6-Trichlorophenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN

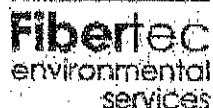
1914 Holloway Drive  
11766 E. Grand River  
0550 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
F: (810) 220-3300  
F: (231) 775-8368

F: (517) 699-0386  
F: (810) 220-3311  
F: (231) 775-8584

lab@fibertec.us



28433

Wednesday, April 30, 2008

Page 8 of 9

## Analytical Laboratory Report

Client Identification: NTH Consultants, Ltd. - Detroit

Sample Matrix: TCLP Extract

Fibertec Project Number: 28433

Sample Number: 28433-004B

### Client Sample Information

Project Identification: Garden View Estates

Client Sample Description: SED-2

Project Number: 14-070621-00

Client Sample Number: 4

Sample Date: 4/22/2008

Chain of Custody Number: 75103

## Comments:

## Definitions:

ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available

FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;

E = Estimated value; J = Analyte positively identified - estimated value

X = Spike recovery distorted due to elevated sample target analyte concentration (&gt;=4X the amount spiked)

Y = Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
TCLP MI-10 Elements by ICP/MS (EPA 3010A/EPA 6020) (TCLP (1311) Extraction Date: 4/28/2008)								
Arsenic	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Barium	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Cadmium	ND	mg/L	0.20	1	PT08D29B	4/29/2008	4/29/2008	JLH
Chromium	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Copper	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Lead	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Selenium	ND	mg/L	0.20	1	PT08D29B	4/29/2008	4/29/2008	JLH
Silver	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
Zinc	ND	mg/L	1.0	1	PT08D29B	4/29/2008	4/29/2008	JLH
TCLP Mercury (EPA 7470A) (TCLP (1311) Extraction Date: 4/28/2008)								
Mercury	ND	mg/L	0.050	1	PM08D29D	4/29/2008	4/29/2008	MAJ
TCLP Volatiles (EPA 5030B/EPA 8260B) (TCLP (1311) Extraction Date: 4/28/2008)								
Benzene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Carbon Tetrachloride	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Chlorobenzene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Chloroform	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
1,1-Dichloroethene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
1,2-Dichloroethane	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
1,4-Dichlorobenzene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS

1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
F: (616) 220-3300  
T: (231) 775-8360

F: (517) 699-0380  
F: (616) 220-3311  
F: (231) 775-8584

lab@fibertec.us

05/06/2008 14:08 313-309-2100

(FAX)

P.010/011

**Fibertec**  
environmental  
services

28433

Wednesday, April 30, 2008

Page 9 of 9

## Analytical Laboratory Report

Client Identification: NTH Consultants, Ltd. - Detroit

Sample Matrix: TCLP Extract

Fiberite Project Number: 28433

Sample Number: 28433-004B

### Client Sample Information

Project Identification: Garden View Estates

Client Sample Description: SED-2

Project Number: 14-070621-00

Client Sample Number: 4

Sample Date: 4/22/2008

Chain of Custody Number: 75103

#### Comments:

#### Definitions:

ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available

FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;

E = Estimated value; J = Analyte positively identified - estimated value

X = Spike recovery distorted due to elevated sample target analyte concentration (&gt;4X the amount spiked)

Y = Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
TCLP Volatiles (EPA 5030B/EPA 8260B) (TCLP (1311) Extraction Date: 4/28/2008)								
2-Butanone	ND	mg/L	0.50	20	VB08D29A	4/29/2008	4/29/2008	JAS
Tetrachloroethene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Trichloroethene	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
Vinyl Chloride	ND	mg/L	0.020	20	VB08D29A	4/29/2008	4/29/2008	JAS
TCLP Semivolatiles (EPA 3510C/EPA 8270C) (TCLP (1311) Extraction Date: 4/28/2008)								
2,4-Dinitrotoluene	ND	mg/L	0.10	4	45366	4/29/2008	4/29/2008	LAN
Hexachlorobenzene	ND	mg/L	0.10	4	45366	4/29/2008	4/29/2008	LAN
Hexachlorobutadiene	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Hexachlorocyclopentadiene	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
2-Methylphenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
3,4-Methylphenol	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Nitrobenzene	ND	mg/L	0.10	1	45366	4/29/2008	4/29/2008	LAN
Pentachlorophenol	ND	mg/L	0.10	1	NA	NA	4/29/2008	LAN
Pyridine	ND	mg/L	0.10	1	NA	NA	4/29/2008	LAN
2,4,5-Trichlorophenol	ND	mg/L	0.10	1	NA	NA	4/29/2008	LAN
2,4,6-Trichlorophenol	ND	mg/L	0.10	1	NA	NA	4/29/2008	LAN

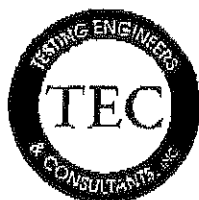
1914 Holloway Drive  
11766 E. Grand River  
8660 S. Mockingbird Trail

Holt, MI 48842  
Brighton, MI 48116  
Cedarburg, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
F: (231) 775-8368

F: (517) 699-0366  
F: (810) 220-3311  
F: (231) 775-8584

lab@fibertec.us



## Testing Engineers & Consultants, Inc.

1343 Rochester Road • P.O. Box 249 • Troy, Michigan 48099-0249  
(248) 588-6200 or (313) T-E-S-T-I-N-G  
Fax (248) 588-6232

April 12, 2007

TEC Report 48040-001-3

**Ms. Lori Harris**

Gardenview Homes I Limited Dividend Housing Association, LLC  
733 Broadway  
Albany, New York 12207

RE: Section 7A Compliance Analysis  
Proposed Gardenview Estates Phase 1  
Detroit, Michigan

Dear **Ms. Harris**:

Testing Engineers & Consultants, Inc. (TEC) has completed the Section 7A Compliance Analysis of the Proposed Gardenview Estates Phase 1 (Site) located in Detroit, Wayne County, Michigan.

We are pleased to provide this service and hope that we can be of service in the future. Should you have any questions or require further information, please do not hesitate to call us at **(248) 588-6200**.

Respectfully submitted,  
TESTING ENGINEERS & CONSULTANTS, INC.

A handwritten signature in black ink, appearing to read "Andrew J. Foerg", enclosed within a red rectangular box.

Andrew J. Foerg, CPG  
Senior Geologist

A handwritten signature in black ink, appearing to read "Duncan R. Mein", enclosed within a red rectangular box.

Duncan R. Mein, P.E.  
Manager, Environmental Assessment

Copyright 1997 Testing Engineers & Consultants, Inc. All rights reserved.

All services undertaken are subject to the following policy: Reports are submitted for exclusive use of the clients to whom they are addressed. Their significance is subject to the frequency and representative character of the samples sent to the comprehensiveness of the tests, examinations and surveys made. No quotation from reports or use of TEC's name is permitted except as expressly authorized by TEC in writing.

CONSULTING ENGINEERS & FULL-SERVICE PROFESSIONAL TESTING AND INSPECTION  
OFFICES IN ANN ARBOR, DETROIT, AND TROY

FOUNDED IN 1966

2006  
**40<sup>th</sup>**  
ANNIVERSARY

## Testing Engineers &amp; Consultants, Inc.

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION, LLC  
SECTION 7A COMPLIANCE ANALYSIS  
PROPOSED GARDENVIEW ESTATES PHASE I, DETROIT, MI

TEC REPORT 48040-001-3

APRIL 12, 2007

TABLE OF CONTENTS

**AFFIDAVIT OF ENVIRONMENTAL PROFESSIONAL IN SUPPORT OF A PETITION  
FOR A DETERMINATION OF COMPLIANCE WITH SECTION 20107a (FORM  
EQP4447 (REV. 4/03))**

<b>1.0</b>	<b>DETAILED CHARACTERISTICS OF PROPERTY USE .....</b>	<b>1</b>
1.1	Current Property Use .....	1
1.2	Proposed Property Use .....	1
<b>2.0</b>	<b>Hazardous Substance Information.....</b>	<b>2</b>
2.1	Hazardous Substances Present.....	2
2.2	Hazardous Substance Concentration, Fate, and Transport .....	3
2.3	Complete Human Exposure Pathways.....	5
2.4	Incomplete Human Exposure Pathways .....	5
2.5	Intended Land Use .....	6
<b>3.0</b>	<b>PLAN FOR RESPONSE ACTIVITIES (PRA).....</b>	<b>6</b>
3.1	Response Activities During Construction .....	7
3.2	Response Activities - Post Development.....	8
<b>4.0</b>	<b>EVALUATION AND DEMONSTRATION OF COMPLIANCE WITH SECTION 7A OBLIGATIONS.....</b>	<b>8</b>
4.1	Exacerbation .....	9
4.2	Due Care .....	9
4.3	Reasonable Precautions .....	11

ATTACHMENTS

FIGURE 1	SITE LOCATION MAP
FIGURE 2	SITE FEATURES DIAGRAM
FIGURE 3	PROPOSED SITE DEVELOPMENT PLAN



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
REMEDATION AND REDEVELOPMENT DIVISION

**AFFIDAVIT OF ENVIRONMENTAL PROFESSIONAL IN SUPPORT OF A PETITION FOR A  
DETERMINATION OF COMPLIANCE WITH SECTION 20107a (FORM EQP4447 (REV. 4/03))**  
(Under the authority of Part 201, 1994 Act 451, as amended, and the Rules promulgated thereunder)

STATE OF Michigan )  
 )  
COUNTY OF Oakland )

The purpose of this Affidavit is to set forth certain information and documentation to enable the Michigan Department of Environmental Quality (hereinafter the "DEQ") to make a determination on compliance with Section 20107a of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act (hereinafter the "NREPA"), 1994 PA 451, as amended, MCL 324.20107a, in conjunction with a Baseline Environmental Assessment ("BEA") Determination pursuant to Section 20129a of the NREPA, MCL 324.20129a. All terms found in this document which are defined in the NREPA, Part 3, Part 201, and the Part 201 Rules shall have the same meaning as in the statute and Part 201 Rules.

The undersigned affiant, being first duly sworn, deposes and says as follows:

1. **THIS AFFIDAVIT** is executed by the undersigned Andrew J. Foero, CPG, whose title is Senior Geologist working for Testing Engineers & Consultants, Inc. located at 1343 Rochester Road, Troy, Michigan 48063.
2. The affiant was retained by Gardenview Homes I Limited Dividend Housing Association, LLC, (hereinafter the "Petitioner") to conduct a BEA on a property located at Phase 1 of the Proposed Gardenview Estates, a 6.556 acre rectangular parcel of land located on the west side of Asbury Park Avenue, and the southeast corner of the parcel located approximately 650 feet north of Tireman Avenue, within the City of Detroit, Wayne County, Michigan (hereinafter the "Property").
3. I have 19 years of professional experience in the investigation and remediation of sites of environmental contamination. A copy of my qualifications, including education and work experience, is attached.
4. The Section 7a Compliance Analysis (hereinafter the "Section 7a CA") for the Property was prepared by the affiant and completed on April 12, 2007. The Section 7a CA for the property will, when implemented, to the best of the affiant's knowledge and belief, satisfy the requirements of Section 20107a of the NREPA.
5. The language in this Affidavit does not deviate from that in the model Affidavit, Form EQP4447 (Rev. 4/03).

I affirm to the best of my knowledge and belief that the information contained in the Section 7a CA prepared for this Property is true and accurate.

I understand that intentionally submitting false information to the DEQ is a felony and may result in fines of up to \$25,000 for each violation.

I certify that I am fully authorized by the Petitioner I represent to execute this Affidavit.

Andrew J. Foera

Signature of Environmental Professional

4-12-07

Date

Andrew J. Foera CPG  
Print or Type Legal Name

SUBSCRIBED AND SWORN to before me this 13 day of April, 2007, a  
Notary Public in and for Oakland County, Michigan.

Brian Edward Belian

Notary Public

My Commission Expires: 4/29/2007

BRIAN EDWARD BELIAN  
NOTARY PUBLIC OAKLAND CO., MI  
MY COMMISSION EXPIRES Apr 29, 2007  
ACTING IN Oakland COUNTY, MI



**Testing Engineers & Consultants, Inc.****ANDREW J. FOERG, CPG****TITLE:**

Senior Geologist  
Environmental Assessment Department

**EDUCATION:**

BS, Geology  
Wayne State University, 1985

**PROFESSIONAL DEVELOPMENT:**

40-Hour Hazardous Waste Training Certification (OSHA)  
8-Hour Site Supervisor/Manager Health & Safety Course (OSHA), 2004  
Risk Based Corrective Action Training - Foster Wheeler

**LICENSES AND CERTIFICATIONS:**

Certified Professional Geologist, American Institute of Professional Geologists  
Registered Professional Geologist, State of Indiana  
Certified Professional Geologist, State of Kentucky  
Certified Underground Storage Tank Professional, State of Michigan

**EXPERIENCE:**

Over nineteen (19) years experience in management and supervision of environmental site assessment investigations, hydrogeological studies, landfill studies, soil and water sample collection and field analysis, soil gas surveys, underground storage tank management, geophysical surveys utilizing Ground Penetrating Radar, remedial investigations and management, brownfields, hazardous waste closures, construction readiness assessment and decommissioning projects. Responsibilities include client consultation, design and planning of environmental investigations, and the coordination of all project management. Experience also includes enforcing solid waste/hazardous waste regulations at facilities located in Wayne County and the coordination and implementation of Michigan Department of Environmental Quality Groundwater Monitoring Program at solid waste disposal sites located in southeastern Michigan.

**SAMPLING OF PROJECTS:**Environmental Site Assessments

Phase I of Former Herman Gardens - Detroit, MI  
Phase II of Lee Plaza Apartment Building - Detroit, MI  
Phase II of Woodland Apartments - Detroit, MI

**Testing Engineers & Consultants, Inc.****ANDREW J. FOERG, CPG Cont.****SAMPLING OF PROJECTS: Cont.**Environmental Site Assessments Cont.

Phase I/II/III and decommissioning activities of 1300 acres of industrial/commercial property, prior to development of automotive assembly plant, Flint, MI

Phase I/II/III of automotive dealerships, throughout the United States

Phase I of three city blocks prior to demolition at the proposed site of a new hospital - Detroit, MI

Phase I of a metal working facility - Detroit, MI

Phase I of a 300-acre parcel including a medical research facility - Rochester, MI

Phase I of a bulk warehouse facility - Detroit, MI

Phase II and development of a remedial investigation workplan for a tool and die facility - Warren, MI

Phase II to determine the impact of leaking drums located adjacent to client's property - Troy, MI

Phase II and preliminary hydrogeological investigation of methylene chloride-contaminated site - Madison Heights, MI

Phase III remedial investigation of heavy metal and volatile organic compound-contaminated soils and ground water - Warren, MI

Phase III to delineate the heavy metal and trichloroethylene contamination at a production/painting facility - Warren, MI

Phase IV remediation of organic compound-contaminated soils - Roseville, MI

Phase I, II, III and IV of an illegal dumpsite on the bank of a river - Jackson, MI

Phase I, II and III of a former public transportation facility.

Project involved over 20 soil borings and 70 surface samples to evaluate sources of contamination, which included former underground storage tanks and toxic metals in fill soils - Highland Park, MI

Construction Readiness Assessment

Former Herman Gardens - Detroit, MI

Confidential Development in Southfield, MI

Underground Storage Tank Management

Hydrogeological investigation/feasibility study of a site impacted by diesel and gasoline underground storage tanks - Pontiac, MI

Subsurface investigation, soil remediation, and hydrogeological investigation of a jet fuel underground storage tank farm - Canton, MI

Subsurface investigation and remediation of diesel fuel-contaminated soils at an underground storage tank site - Dearborn, MI

Development and implementation of remedial investigation workplan - Wyandotte, MI

Managed national UST release investigation program for large insurance carrier, throughout United States

Pat Moran Chevrolet - Clinton Twp., MI

**Testing Engineers & Consultants, Inc.****ANDREW J. FOERG, CPG Cont.****SAMPLING OF PROJECTS: Cont.**Hydrogeological Investigations

Hydrogeological investigation which delineated three sources of contamination to the soil and ground water. A feasibility study was performed and a corrective action plan was developed to address remediation alternatives - Kalamazoo, MI

Phase IV remedial and hydrogeological investigation of hexavalent chromium and halogenated volatile organic compound-contaminated soil and ground water. Included the design of an interim ground water treatment system with an activated carbon and ion exchange resin treatment system - Detroit, MI

Multi-phased hydrogeological investigation of a former gasoline station - Mount Clemens, MI

Hydrogeological Investigation at Above Ground Storage Tank farm at assembly plant, Wilmington Delaware

Soil and groundwater evaluation at auto dealership in accordance with New Jersey Department of Environmental Protection requirements, Montclair New Jersey

Ground Penetrating Radar Investigation

Suspected underground storage tank - Dearborn, MI

Void spaces adjacent to water pipe - Benton Harbor, MI

Investigation performed on the roof of a hospital to locate the building support columns - Flint, MI

Remediation Projects

Subsurface investigation at a school was performed to delineate the horizontal and vertical extent of soils contaminated with organic and inorganic compounds. Remediation of contaminated soil was performed in conjunction with the application of engineering controls. A Type C closure proposal was prepared and submitted to the Michigan Department of Natural Resources and is pending approval - Dearborn, MI

Subsurface/hydrogeological investigation and remedial investigation/feasibility study at a site contaminated with volatile and semi-volatile organic compounds - Dryden, MI

Investigation and Limited Industrial Closure of petroleum bulk terminal. Closure approach involved use of engineered exposure barriers, Taylor, MI

Investigation and remediation of incinerator waste at former military base, Dublin, CA

Investigation and remediation at former scrap/salvage yard, Resulted in state approved closure, Conshohocken, PA

Managed hydraulic lift removal program for national retailer in 10-state region.

Pat Moran Chevrolet - Clinton Twp., MI

Decommissioning Projects

Pat Moran Chevrolet - Clinton Twp., MI

Mercury in waste water discharge in a hospital - Flint, MI

WWTP - Trenton, MI

**American Institute of Professional Geologists**

1400 W. 122nd Ave., Suite 250, Westminster, CO 80234

(303) 412-6205 • Fax (303) 253-9220

aipg@aipg.org • www.aipg.org

**CERTIFIED PROFESSIONAL GEOLOGIST**

**Andrew John Foerg, CPG-09977**

**Valid through 12/31/2007**



Kelvin J. Buchanan  
President AIPG 2007

AIPG 44th Annual Meeting - Traverse City, Michigan  
October 7 - 11, 2007



Kentucky Board of  
Registration for  
Professional Geologists  
Certifies

Andrew J. Foerg  
Professional Geologist


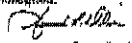
*Kentucky*  
UNBROKEN SPIRIT

Registration Number: KY-1958

Expiration Date: 9/30/2007

**LICENSED PROFESSIONAL GEOLOGIST**

State of Indiana

NAME <b>Andrew John Foers</b>		LICENSE NO. <b>1428</b>
	LICENSE DATE <b>3/4/1994</b>	EXPIRATION DATE <b>3/31/2007</b>
	This person has completed the requirements of the Indiana Board of Licensure for Professional Geologists.  Licensing Coordinator	
STATE BOARD OF REG.		





*Certificate of Training*



has successfully completed \_\_\_\_\_ hours of instruction in \_\_\_\_\_

HAZARDOUS MATERIAL HANDLING

Prepared and conducted by ASI, Environmental Technologies  
to comply with OSHA 1910.120

*Ross K. [Signature]*

Trainer

11-30-90

Date of Completion

1000 H J L A



# MEMBER OCCUPATIONAL TRAINERS, INC.

*Certify That*

**ANDREW J. FOERG**

*has successfully completed the*

*8 Hour Hazardous Waste Operations and Emergency Response Course*

*in compliance with 29 CFR 1910.120 (d) (1)*

*Andrew J. Foerg*  
Metro Occupational Trainers, Inc.

*February 9, 2007*

*Date*

Metro Occupational Trainers, Inc., 34344 Verona Park Dr., Norcross, MI 48042 (888) 412-TRNG-49

City of Metropolitan Area of Class Attended: Detroit  
Company Name: Training Engineers & Consultants, Inc.  
Student ID: 0705409-11051



## STATE OF MICHIGAN



JOHN ENGLER, Governor

## DEPARTMENT OF ENVIRONMENTAL QUALITY

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48206-7973

RUSSELL J. HARDING, Director

REPLY TO:

UNDERGROUND STORAGE TANK DIVISION  
TOWN CENTER  
PO BOX 30157  
LANSING MI 48206-7957

September 18, 1996

ANDREW J FOERG  
20200 LICHFIELD  
DETROIT, MI 48221

SUBJECT: Certified Professional Number 613

Dear Certified Professional:

It is my pleasure to inform you that you have been approved as a certified underground storage tank professional (CP) pursuant to Part 215, Michigan Underground Storage Tank Financial Assurance (MUSTFA), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

Please make certain that your application package is kept current by submitting copies of licenses, certifications and OSHA training certificates as well as any changes in employment or address. Failure to update your application package within 10 days of above referenced expirations or changes may result in revocation of your CP designation. As stated in Section 21543 of Part 215, any false or erroneous information contained in the documents submitted or representations made may constitute fraud on the part of the individual involved and may involve enactment of legal proceedings and revocation of certification. All information submitted to update your file must include your reference number and should be addressed to the Michigan Department of Environmental Quality, Underground Storage Tank Division, P.O. Box 30157, Lansing, Michigan 48909-7657.

If you have any questions or comments, please contact Ms. Betty Michalski at 517-335-7244.

Sincerely,

Arthur R. Nash Jr., Chief  
Underground Storage Tank Division  
517-373-2789

## Certificate of Completion

This Certifies That

ANDREW FOERG

Has Completed the 8-Hour Health and  
Safety Training Course per 29 CFR  
1910.120 for Site Supervisors/Managers

APRIL 16, 1991  
Date

Certificate No. S- 031



*Joseph Colacitera CIII*  
Health and Safety Coordinator  
NTI Consultants, Ltd.

Technical &  
Professional  
Training



*Andy Foerg*

*Is Awarded 1.2 CEUs  
for successful completion of  
the course on*

*Risk-Based Corrective Action*

*August 7-8, 1995*

*Lansing, MI*

*James A. Jones*  
\_\_\_\_\_  
President

*Scott W. Pringle*  
\_\_\_\_\_  
Manager, Standards Technology Training

# National Society of Professional Engineers Certificate of Completion

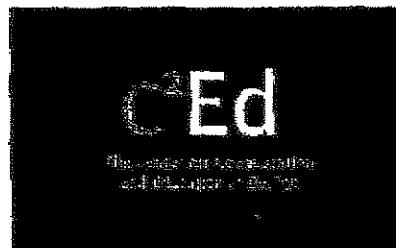
This certifies that Andy Foerg has completed

*Conflicts of Interest*

1.0 Professional Development Hour

March 24, 2004

NSPE Spring 2004 Ethics Forum - Live Webcast Series



Mary K. Maul  
NSPE Manager of Education

## Testing Engineers &amp; Consultants, Inc.

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION  
SECTION 7A COMPLIANCE ANALYSIS  
GARDENVIEW ESTATES PHASE I, DETROIT, MICHIGAN

TEC REPORT 48040-001-3  
APRIL 12, 2007  
PAGE 1 of 11

**SECTION 7A COMPLIANCE ANALYSIS**

**FOR THE PROPOSED GARDENVIEW ESTATES PHASE 1 (SITE)  
A 6.556 ACRE PARCEL LOCATED WEST OF ASBURY PARK AVENUE,  
650 FEET NORTH OF TIREMAN AVENUE IN THE  
CITY OF DETROIT, WAYNE COUNTY, MICHIGAN**

**REQUESTED IN CONJUNCTION WITH A  
BASELINE ENVIRONMENTAL ASSESSMENT**

**1.0 DETAILED CHARACTERISTICS OF PROPERTY USE****1.1 *Current Property Use***

The Proposed Gardenview Estates Phase 1 (Site) is currently owned by the Detroit Housing Commission (DHC) and is zoned for residential use. The Site is undeveloped idle land, and is a portion of the larger former DHC housing development, the former Herman Gardens. Roads, sewers and utility lines associated with the former development are present, but are not in use, however no buildings or other structures were observed on the Site. Vegetation on Site consisted of grass and weeds, with a few mature trees. Figure 1 presents a Site Location Map and Figure 2 presents a Site Features Diagram. Please note that Phase 1 is proposed for development concurrently with the parcels designated as Phase 2A and Phase 2B, therefore these parcels are also included on the drawings.

Based on information collected during the Phase I and II Environmental Site Assessments (ESA), contamination associated with demolition debris derived from the former Herman Gardens Housing Development and possibly imported fill is present on Site. The information collected during the ESAs indicates that arsenic and PNAs are present in the fill at the Site at concentrations above Part 201 Direct Contact Generic Residential Cleanup-Criteria (DCC GRCC).

**1.2 *Proposed Property Use***

Gardenview Homes I Limited Dividend Housing Association LLC plans to construct multi-unit residential buildings. A proposed Site Development Plan is included as Figure 3. The plan presents the proposed future development of the Site and surrounding properties.

During development of the Site various earth moving activities associated with surface preparation, pavement and infrastructure development and building foundations are anticipated. The project specifications are not available at this time. The Site will be serviced by electric, sanitary sewers, storm sewers, natural gas, and municipal water.

## Testing Engineers &amp; Consultants, Inc.

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION  
SECTION 7A COMPLIANCE ANALYSIS  
GARDENVIEW ESTATES PHASE I, DETROIT, MICHIGAN

TEC REPORT 48040-001-3  
APRIL 12, 2007  
PAGE 2 of 11

## 2.0 HAZARDOUS SUBSTANCE INFORMATION

### 2.1 Hazardous Substances Present

#### SYNOPSIS

Two fill horizons, shallow (possibly imported) and deep (Site derived demolition debris) are present. The Site is underlain by native mottled brown clay and native gray clay. No groundwater was observed although several isolated, discontinuous saturated zones, perched in more porous fill materials, were present.

Relevant exposure pathways for the Site include indoor air, ambient air and direct contact.

The Phase II ESA has adequately characterized the nature of the shallow and deep fill and the underlying native clay. A facility specific background (FSB) concentration of arsenic (8,950 µg/kg) was calculated. Therefore the DCC GRCC for arsenic defaults to the FSB concentration of 8,950 µg/kg.

Exceedences of the DCC GRCC were noted in both shallow and deep fill samples. The majority of exceedences were for arsenic and benzo(a)pyrene, although one sample had exceedences of multiple PNAs.

#### HAZARDOUS SUBSTANCES KNOWN TO BE PRESENT AT CONCENTRATIONS ABOVE GRCC

Arsenic and PNA concentrations greater than DCC GRCC were detected in ten soil samples at depths ranging from 1 to 10 feet. The soil analytical data is summarized on Tables 5 and 6 in the Phase II ESA report attached to the BEA. The locations of the soil samples and exceedences are depicted on Figure 4 in the Phase II ESA report attached to BEA.

Samples with reported concentrations that exceed relevant GRCC include the following:

Seven shallow fill samples had reported concentration criteria exceedences of one or more target analytes as listed below:

Sample ID	Exposure Unit	Compound	GRCC Exceeded
B-117-1	EU 1	Arsenic	DCC
B-119-1	EU 1	Benzo(a)pyrene	DCC
B-109-1	EU 2	Arsenic, Benzo(a)pyrene	DCC
B-108-1	EU 2	Arsenic	DCC

## Testing Engineers &amp; Consultants, Inc.

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION  
SECTION 7A COMPLIANCE ANALYSIS  
GARDENVIEW ESTATES PHASE I, DETROIT, MICHIGAN

T&C REPORT 48040-001-3  
APRIL 12, 2007  
PAGE 3 of 11

Sample ID	Exposure Unit	Compound	GRCC Exceeded
B-132-1	EU 4	Benzo(a)pyrene	DCC
B-144-1	EU 4	Benzo(a)pyrene	DCC
B-172-1	EU 7	Arsenic	DCC

Sample B-109-1 had a reported total lead concentration that exceeded the DCC GRCC. In accordance with MDEQ protocol, the sample was then partitioned into fine and coarse fractions and each fraction was analyzed for lead separately. The reported concentrations for the fine and coarse fractions did not exceed any relevant GRCC.

Three deep fill samples had reported exceedences of one or more target analytes as listed below:

Sample ID	Exposure Unit	Compound	GRCC Exceeded
B-148-10	EU 3	Multiple PNAs	DCC
B-149-6	EU 5	Benzo(a)pyrene	DCC
B-177-5	EU 6	Benzo(a)pyrene	DCC

#### ABANDONED OR DISCARDED ASTS, USTS OR HAZARDOUS SUBSTANCE STORAGE CONTAINERS

No abandoned or discarded aboveground storage tanks (ASTs), underground storage tanks (USTs), or hazardous substance storage containers were present on Site during the March 2007 Site reconnaissance.

#### 2.2 Hazardous Substance Concentration, Fate, and Transport

##### Concentration

The following table summarizes the hazardous substances known to be present at the Site at concentrations above relevant GRCC.

## Testing Engineers &amp; Consultants, Inc.

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION  
SECTION 7A COMPLIANCE ANALYSIS  
GARDENVIEW ESTATES PHASE I, DETROIT, MICHIGAN

TEC REPORT 48040-001-3  
APRIL 12, 2007  
PAGE 4 of 11

Hazardous Substance	Chemical Abstract Service (CAS) Number	Highest Concentration ( $\mu\text{g}/\text{kg}$ )	*Direct Contact Criteria ( $\mu\text{g}/\text{kg}$ )
Arsenic	7440382	15,000	*8,950
Benzo(a)pyrene	50382	96,000	2,000
Benzo(a)anthracene	56553	110,000	20,000
Dibenzo(a,h)anthracene	53703	5,700	2,000
Benzo(b)fluoranthene	205997	110,000	20,000
Indeno(1,2,3-cd)pyrene	193395	46,000	20,000

\* Direct Contact Criteria defaults to calculated Facility Specific Background level for arsenic of 8,950  $\mu\text{g}/\text{kg}$ .

Further details of the existing contamination at the Site can be found in the Category N Baseline Environmental Assessment (BEA) dated April 12, 2007.

Fate/Transport

## ARSENIC

Arsenic levels in the on-Site fill may not have resulted from anthropogenic processes, rather they are more likely the result of the variation inherent in naturally occurring minerals. This is supported by the historical use of the Site (residential) and the data which indicates no significant difference between the range of values found in the shallow, possibly imported fill and the deeper Site derived demolition debris. However, several of the reported concentrations exceed the relevant GRCC.

Arsenic is a semi-metallic element or metalloid that has several allotropic forms. Forms commonly found at metal contaminated sites include  $\text{As}_2\text{O}_3$  and arsenic species which have leached from  $\text{As}_2\text{O}_3$  oxide to As (V) and then sorbed onto iron bearing minerals in soil. As (V) may form insoluble metal arsenates. The solubility of other forms, including organometalloids depends on factors such as pH, the presence of other soil constituents, the presence of water, etc.

The leaching distance of arsenic is generally short because of its tendency to sorb to soils and sediments, however soluble forms move easily with water. The tendency to sorb to soils increases when clays, iron oxides, aluminum hydroxides, and organic materials are present, therefore the leaching tendency is higher when these minerals are not present.



## Testing Engineers &amp; Consultants, Inc.

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION  
SECTION 7A COMPLIANCE ANALYSIS  
GARDENVIEW ESTATES PHASE I, DETROIT, MICHIGAN

TEC REPORT 48040-001-3  
APRIL 12, 2007  
PAGE 5 of 11

## PNAs

Polynuclear aromatic hydrocarbons (PNAs or PAHs) are a class of compounds found throughout the environment in the air, in the soil and in the water. They are found naturally in crude oil, creosote, coal tar, and coal. They are also produced during incomplete combustion of hydrocarbons like coal, oil, gas, tobacco, and during forest fires. PAHs generally exist as colorless, pale yellow or white solids. Because they do not dissolve easily in water and generally do not burn, they can persist in the environment for months to years.

### 2.3 Complete Human Exposure Pathways

Human exposure pathways that are or may become complete include:

**Soil Direct Contact** – This pathway is complete at the Site. Several samples of soil/fill had reported concentrations of arsenic and/or PNAs in excess of the DCC GRCC, and no exposure barrier is present.

**Particulate Soil Inhalation** – This pathway may be complete at the Site. Although two samples with total analyzed concentrations of lead exceeded the PSIC GRCC, neither the coarse or fine fractions had reported concentrations in excess of these criteria. However, it is possible that on-Site soil/fill may contain lead concentrations in the fine and/or coarse fractions that exceed PSIC GRCC, and no exposure barrier is present.

**Groundwater Surface Water Interface Protection** – This pathway is not and will not become complete at the Site because no groundwater was present. Although no groundwater is present on Site, development plans call for discharge of storm water off Site to the City of Detroit sewer system. Several compounds, including metals and PNAs, had reported concentrations above GSIP criteria. In addition, this pathway could become complete off Site in the event that on-Site soil/fill is transported off Site to an uncontrolled location where groundwater and surface water could be impacted.

**Drinking Water Protection** – This pathway is not and will not become complete at the Site because no groundwater is present and because drinking water is provided exclusively by the City of Detroit municipal system. However, this pathway could become complete off Site in the event that on-Site soil/fill is transported off Site to an uncontrolled location where an aquifer could be impacted.

### 2.4 Incomplete Human Exposure Pathways

Human exposure pathways that are not and will not become complete include:

**Groundwater Contact Protection** – This pathway is not complete at the Site because no groundwater is present and because Target compounds did not exhibit reported concentrations above GCC GRCC.

**Testing Engineers & Consultants, Inc.**

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION  
SECTION 7A COMPLIANCE ANALYSIS  
GARDENVIEW ESTATES PHASE I, DETROIT, MICHIGAN

TEC REPORT 48040-001-3  
APRIL 12, 2007  
PAGE 6 of 11

**Soil Volatilization to Indoor Air** – This pathway is not complete at the Site because target compounds did not exhibit reported concentrations above SVIA GRCC.

**Soil Volatilization to Ambient Air** – This pathway is not complete at the Site because target compounds did not exhibit reported concentrations above VSIC GRCC.

**Residential Drinking Water** – This pathway is not complete at the Site because no groundwater is present.

**Groundwater Surface Water Interface** - This pathway is not complete at the Site because no groundwater is present.

**Residential Groundwater Volatilization to Indoor Air** - This pathway is not complete at the Site because no groundwater is present.

**Groundwater Contact** - This pathway is not complete at the Site because no groundwater is present.

## **2.5 Intended Land Use**

The intended land use is residential, therefore residential GRCC are applicable.

## **2.6 Fire and Explosion Hazards**

No fire or explosion hazards have been identified.

## **3.0 PLAN FOR RESPONSE ACTIVITIES (PRA)**

A Plan for Response Activities (PRA) is necessary because response activities are necessary to meet Due Care obligations. The PRA will cover proposed activities to mitigate unacceptable exposures during construction and post-development periods related to the following complete, or potentially complete exposure pathways:

- Soil Direct Contact
- Particulate Soil Inhalation
- Groundwater Surface Water Interface Protection
- Drinking Water Protection

The potential for unacceptable exposures at the Site involves chronic exposure (i.e. long term) rather than acute exposure (immediate or short term) scenarios. Therefore the proposed response activities during the construction/development phase are focused on mitigating chronic exposures as well as

## Testing Engineers & Consultants, Inc.

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION  
SECTION 7A COMPLIANCE ANALYSIS  
GARDENVIEW ESTATES PHASE I, DETROIT, MICHIGAN

TEC REPORT 48040-001-3  
APRIL 12, 2007  
PAGE 7 of 11

preventing exacerbation and taking precautions against reasonably foreseeable acts or omissions of third parties.

### 3.1 *Response Activities During Construction*

Construction Related Response Activities include:

**Notices** – Notice to bidders and general contractor that Site soil/fill materials are impacted. Notice to selected contractors, subcontractors and all public utility entities that perform on-Site work.

Construction contract specifications will include provisions to ensure that any soil removed from the Site will be handled in accordance with Section 20120(c) of Part 201, Act 451 of 1994.

**Site-Specific Health and Safety Plan (HASP)** – Development of HASP, distribution of HASP to on-Site workers, oversight of HASP implementation by a “Responsible Person” (i.e. qualified representative of developer and/or Detroit Housing Commission). The HASP will mandate industry standard good housekeeping and sanitation procedures as well as personal protective equipment (PPE) requirements. PPE requirements are anticipated to be Level D.

**Dust Control** – Dust control procedures will be designed and implemented. These procedures will require a Responsible Person to visually evaluate dust levels and direct the use of water trucks and street sweepers, as appropriate, to minimize dust levels so they do not present unacceptable exposure to personnel on Site and neighbors.

**Trackout Control** – Procedures to control track out will be designed and implemented to reduce and minimize Site materials from being inadvertently tracked off Site by vehicles leaving the Site. Procedures will include requiring contractors to remove excess soil/fill materials from the exterior of vehicles/equipment and may include the use of devices such as wheel washes. The Responsible Person will evaluate track out conditions and direct track out control procedures.

**Soil/Fill Management** – A soil/fill management program will be designed and implemented. Oversight will be performed by the Responsible Person. This program will mandate appropriate procedures to ensure that on-Site soil/fill materials are managed appropriately. Appropriate management may include off-Site landfill disposal and/or moving materials to other locations on Site that are protective of both direct contact and particulate inhalation pathways (i.e. below proposed pavement, as backfill for utility trenches etc). This also includes handling on-Site soil/fill in manner that prevents:

- Commingling with “clean” materials - separate stockpiles
- Spreading contamination on Site – avoid placing impacted material on otherwise clean surfaces, cover with plastic sheeting
- Off-Site disposal at locations except licensed landfills permitted to accept contaminated materials, or testing to demonstrate that material is uncontaminated
- Reasonably avoidable contact with precipitation

**Testing Engineers & Consultants, Inc.**

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION  
SECTION 7A COMPLIANCE ANALYSIS  
GARDENVIEW ESTATES PHASE I, DETROIT, MICHIGAN

TEC REPORT 48040-001-3  
APRIL 12, 2007  
PAGE 8 of 11

**Water in Fill Management** – It is likely that some areas of fill will contain water. A water management program will be designed and implemented to handle and dispose of the water in an environmentally sound manner. Oversight will be performed by the Responsible Person.

**Exposure Barriers** – Barriers will be designed and constructed to prevent unacceptable direct contact and/or particulate inhalation exposures. Buildings and pavement will provide an acceptable barrier. In greenbelt areas, a minimum of 6 inches of clean, imported fill (i.e. clay, sand, gravel, crushed concrete, topsoil etc.) will be placed over existing on-Site soil/fill.

**Storm Water Management** – Site storm water will be directed to an on-Site retention pond and will be discharged from the basin to a City of Detroit combined sewer.

### **3.2 Response Activities – Post Development**

Post Development response activities include:

**Land Use Restriction** – A land use restriction (i.e. Notice to the Deed, Restrictive Covenant etc.) will be placed on the property. Activities that could result in a breach of the exposure barrier include residents or workers digging or excavating through the clean fill in greenbelt areas for purposes such as planting trees.

**Notices** – Prospective residents will be notified of the land use restrictions through language in the lease or similar conveyance. Contractors and utility companies performing subsurface activities will be provided with notice and proper procedures prior to performing the work. In addition, Notices to Easement Holders will be provided.

**Exposure Barrier Operation and Maintenance** – An appropriate exposure barrier operation and maintenance plan will be developed. These procedures will include periodic inspection by a Responsible Person, and repair/maintenance of pavements and clean fill barriers in a timely manner and under the oversight of the Responsible Person.

Excavation for required maintenance activities (i.e. sprinkler and/or utility repair) would be required to be performed after notice to, and under the oversight of, a Responsible Person. Appropriate notification procedures, dust control, soil management protocols and track out control procedures, etc., will be followed.

## **4.0 EVALUATION AND DEMONSTRATION OF COMPLIANCE WITH SECTION 7A OBLIGATIONS**

This section provides an evaluation of how the proposed use satisfies a person's obligations and Section 7a(1)(a).

## Testing Engineers & Consultants, Inc.

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION  
SECTION 7A COMPLIANCE ANALYSIS  
GARDENVIEW ESTATES PHASE I, DETROIT, MICHIGAN

TEC REPORT 48040-001-3  
APRIL 12, 2007  
PAGE 9 of 11

### 4.1 Exacerbation

**Exacerbation** – The proposed use of the Site as a residential development will not exacerbate existing contamination because the proposed development (buildings, pavement and clean fill in greenbelt areas) provides the exposure barrier that is required to remediate the Site to residential land use based criteria. The proposed development only provides a barrier and will not increase the magnitude or a real extent of the existing contamination or cause other media (groundwater, surface water, air etc.) to become impacted.

**Exacerbation Through Increase in Response Activity Costs** – The proposed use of the Site as a residential development will not result in exacerbation through an increase in response activity costs because the proposed development (buildings, pavement and clean fill in greenbelt areas) provides the exposure barrier that is required to remediate the Site to residential land use based criteria. Therefore, no increase in response activity costs will occur. In addition, the proposed development plan provides the following environmental and health benefits:

**Environmental Benefits** – The proposed development provides barriers to infiltration of precipitation, which will reduce contaminant migration. In addition, the barriers prevent the migration of contamination through dust and vehicular and/or foot traffic.

**Public Health Benefits** – The proposed development provides barriers to exposure through both the direct contact and particulate inhalation pathways.

### 4.2 Due Care

#### Mitigation of Unacceptable Exposures

**Soil Direct Contact/Particulate Soil Inhalation** – The proposed construction related notices will provide advance warning of the direct contact/particulate inhalation (DC/PI) exposures, thereby decreasing the potential of unacceptable exposure. The other construction related protocols (HASP, Responsible Person oversight, dust control, track out control, soil/fill management) also act to mitigate unacceptable DC/PI exposures during construction. The proposed buildings, pavements and clean fill in greenbelt areas will provide a physical barrier to mitigate unacceptable DC/PI exposures. The barriers' effectiveness in mitigating DC/PI exposures will be enhanced by the post development response activities including:

- Land use restrictions and notices to prospective residents (against excavating through barriers)
- Notices to contractors and utility easement holders
- Soil management protocols and Responsible Person oversight in the event of required breaches of the barriers

## Testing Engineers & Consultants, Inc.

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION  
SECTION 7A COMPLIANCE ANALYSIS  
GARDENVIEW ESTATES PHASE I, DETROIT, MICHIGAN

TEC REPORT 48040-001-3  
APRIL 12, 2007  
PAGE 10 of 11

- Operation and maintenance of the barriers including inspection and oversight by the Responsible Person

**Groundwater Surface Water Interface Protection** – Discharge of storm water off Site to the City of Detroit combined sewer system will mitigate potential off-Site GSIP exposures. In addition, the proposed soil management plan, which calls for landfill disposal or confirmatory testing prior to off-Site disposal at an uncontrolled location, will further mitigate potential off-Site GSIP exposures.

**Drinking Water Protection** – The proposed soil management plan, which calls for landfill disposal or confirmatory testing prior to off-Site disposal at an uncontrolled location, will mitigate potential off-Site DWP exposures.

### Exposure Hazard Communication

Exposure hazards will be communicated to third parties in the following manners:

Site Development Construction Workers – will be provided notice in the bid documents and the notice will be reinforced with the successful bidders in the health and safety plan and during the pre-work health and safety briefing.

Post Development Private Contractors – will be provided notice by the Site Manager prior to performing any subsurface work.

Prospective Residents – will be provided notice via language in the master lease document.

Easement Holders of Record – will be provided written notice, by a method that provides proof of delivery, of the general nature and extent of contamination and potential unacceptable exposures.

Utility Franchise Holders of Record – will be provided written notice, by a method that provides proof of delivery, of the general nature and extent of contamination and potential unacceptable exposures.

Owners/Operators of all Public Utilities that Serve the Site – will be provided written notice, by a method that provides proof of delivery, of the general nature and extent of contamination and potential unacceptable exposures.

Owners or Lessees of Severed Subsurface Mineral Rights or subsurface Formations – will be provided written notice, by a method that provides proof of delivery, of the general nature and extent of contamination and potential unacceptable exposures.

### Notice Requirements of Rule 1017

There is no reason to believe that contamination is emanating from or has emanated from the Site, therefore this notice requirement is not applicable.

## Testing Engineers & Consultants, Inc.

GARDENVIEW HOMES I LIMITED DIVIDEND HOUSING ASSOCIATION  
SECTION 7A COMPLIANCE ANALYSIS  
GARDENVIEW ESTATES PHASE I, DETROIT, MICHIGAN

TEC REPORT 49040-001-3  
APRIL 12, 2007  
PAGE 11 of 11

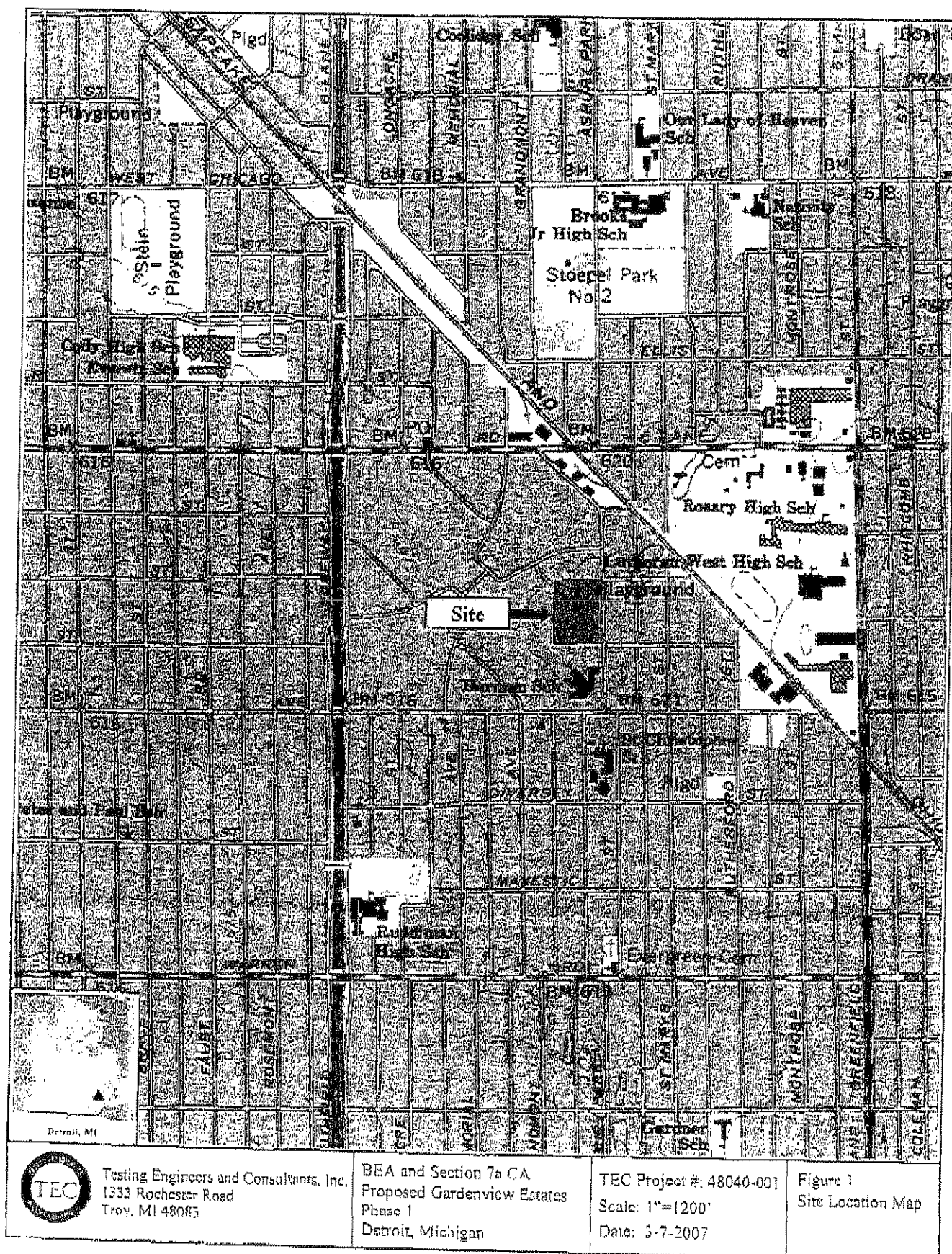
### 4.3 *Reasonable Precautions*

The majority of the reasonably foreseeable acts or omissions of third parties will be mitigated by the pre-construction and post development notices. This will provide a heightened awareness of Site conditions and potential exposure scenarios.

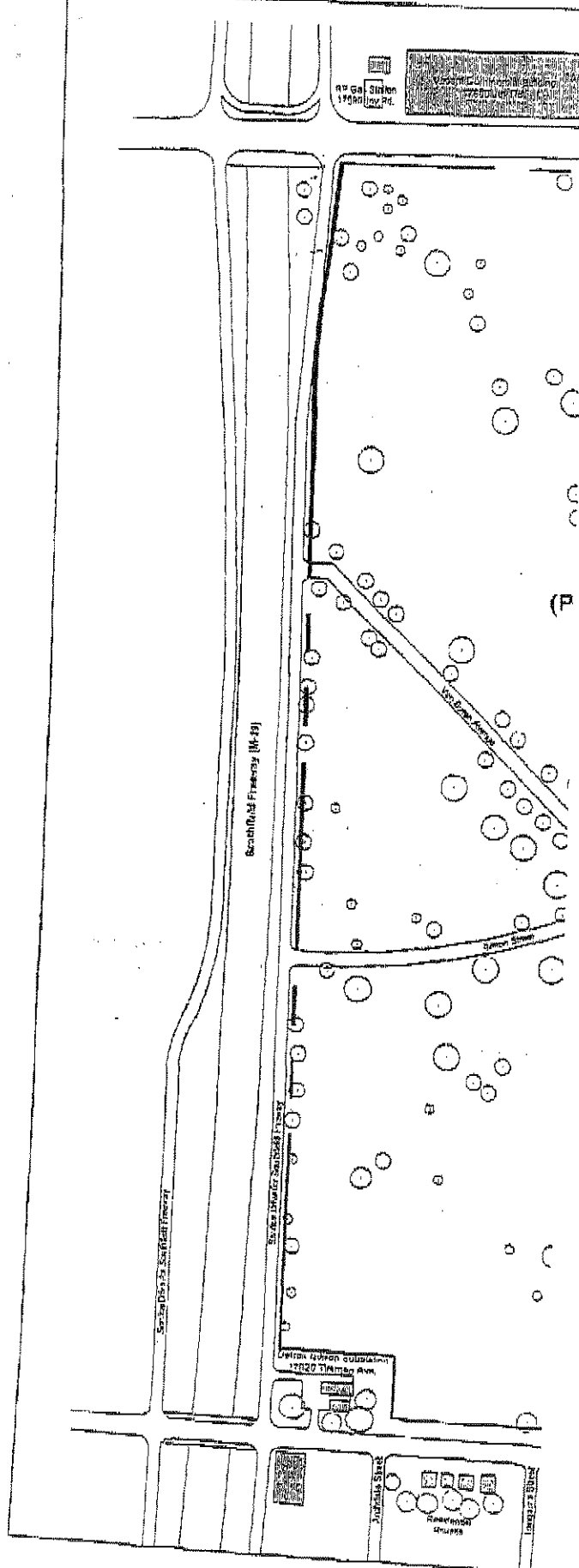
The only other precautions which need to be taken against the reasonably foreseeable acts or omissions of a third party involve the potential off-Site transport of contaminated soil.

Due to the potential for off-Site transport of arsenic impacted soil, construction contract specifications will include provisions to ensure that any soil removed from the site will be handled in accordance with Section 20120(c) of Part 201, Act 451 of 1994.

In addition, the potential for an unauthorized removal (i.e. theft) of stockpiled soil during construction will be mitigated by Site security measures, which will consist of fencing.







LEGEND	
	Approximate Location of Soils Mounds
	Tree(s)
	Trail
	Railroad Track
	Approximate Site Boundary
	Approximate Boundary of Additional Construction Phases
	Asphalt, Concrete, and/or Gravel
	Building

Figure 2  
Site Features Diagram

Phase II Environmental Site Assessment  
Gardenview Estates, Phase 1, 2A, and 2B  
Former Herman Gardens Housing Development  
Detroit, Michigan

PROJECT NUMBER	48040.2	SCALE	1"=300'
DRAWN BY	K. Edmund	DATE	2/7/2007
CHECKED BY	P. Dwyer	DATE	3/7/2007

TESTING ENGINEERS AND CONSULTANTS, INC.

601 W. Fort Street, Suite 412  
Detroit, MI 48226  
313.337.3464



www.testingengineers.com  
258 Phoenix Drive  
Ann Arbor, MI 48106  
313.337.1000